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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/629,626 | 07/30/2003 | Kimiyuki Hayasaki | 00862.023160 | 9131 |

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EXAMINER

VO, ANH T N

ART UNIT PAPER NUMBER

2861

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,626

Applicant(s)

HAYASAKI, KIMIYUKI

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/21/03 & 12/6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on the PTOL 1449 form have been considered.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 8-21 are rejected under 35 USC 102 (e) as being anticipated by Barbour et al (US 6,318,828).

Barbour et al discloses in Figures 1A, 1b and 2-29 a printing system comprising:

- a command generation means (110) for outputting a command for causing the printhead (116) to perform predetermined processing responsive to a reception means (106);
- a carriage (234) which supports the printhead (116, 236) for scanning the printhead on the target printing medium (Figure 2);
- a control means (124), arranged on the said carriage (234), for receiving the command generated by said command generation means (110) and outputting a control signal corresponding to the command to the printhead (116), thereby controlling the printhead (116);
- wherein the printhead (116) comprises storage means (122) for storing feature information, said command generation means (110) outputs a command for acquiring specific information from information held by the printhead (116), and said control means (114) receives the command generated by said command generation means 110), accesses the storage means (122) of the printhead, and acquires specific information corresponding to the command from the storage means (122);
- wherein said control means (124) comprises conversion means (2120, Figures 17 and 21) for converting the command (CS DATA) generated by said command generation means (110) into an access signal containing an address for reading out information specified by the command from the storage means (ROM), and acquisition means (2215) for accessing the storage means (ROM) in response to the access signal obtained by the conversion means (2120), and acquiring the specific information.
- wherein the conversion means (2120) has, in correspondence with each of a plurality of types

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of printheads, a table (not shown) which makes the information specified by the command and a storage address correspond to each other, and generates the access signal by looking up a table corresponding to a mounted printhead;

- wherein the command generated by said command generation means (110) includes a command for driving and controlling the printhead (116);

- wherein the printing element has a heating element (not shown), and performs printing by discharging ink from an orifice arranged in correspondence with the heating element;

- wherein said generation means generates a second command on the basis of a result of executing processing by said control means in accordance with a generated first command, and outputs the second command to said control means (Figures 5-6); and

- wherein a heating element (resistor) is used as the printing element, and printing is performed by discharging ink from an orifice arranged in correspondence with the heating element.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 are rejected under 35 USC 103 (a) as being unpatentable over Barbour et al (US 6,318,828).

Barbour et al discloses in Figures 1A, 1B and 2-29 a printing system with all of the limitations of the base claims as stated above but does not disclose that said command generation means (110) is arranged in said carriage. For example, Barbour et al does not show that the controller (110) is arranged in the carriage; however, a skilled artisan realizes that the controller of a printer such as a microprocessor is the electronic component that can be placed on the carriage or other part of the printer frame as long as it can be interconnected to other part of the printer to perform required function. Thus, placing the controller (110) of Barbour et al on the carriage is considered to be a matter of a mechanical design expedient for an engineer depending upon the physical size and shape of the printer. It would have been obvious to a person having skill in the art at the time the invention was made to rearrange the controller (110) of Barbour et al in the carriage for the purpose of accommodating with the size and shape of the printer such that rearranging the controller would reduces size of the printer.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art reference (US Pat. 6,196,670) cited in the PTO 892 form show a printer which is deemed to be relevant to the present invention. These references should be reviewed.

CONCLUSION


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo. whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M.

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The fax number of this Group 2861 is (703)872-9306.



ANH T.N. VO
PRIMARY EXAMINER

March 18, 2005